November 30, 2001, entitled "Selective Merchandise Price Optimization Mechanism", by Michael Neal, Krishna Venkatraman, Rob Parkin, Suzanne Valentine, Phil Delurgio, Hau Lee, and John Close, which is incorporated by reference herein for all purposes.

At page 8, starting from line 3, please delete the following paragraph

To facilitate understanding, FIG. 7 is an overall flow chart of a process that uses subset optimization 700. First, a product category is optimized (step 701). A demand group is defined as a set of products that are substitutes or near substitutes for each other. A product can belong to only one demand group. A product category consists of one or more demand groups. FIG. 2 is a more detailed flow chart of a preferred embodiment of a process that utilizes the price optimizing system 100 to optimize prices for a product category (step 701). Data 120 is provided from the store computer systems 124 to the econometric engine 104 (step 204). Generally, the data 120 provided to the econometric engine 104 may be point-of-sale information, product information, and store information. The econometric engine 104 processes the data 120 to provide demand coefficients 128 (step 208) for a set of algebraic equations that may be used to estimate demand (volume sold) given certain marketing conditions (i.e. a particular store in the chain), including a price point. The demand coefficients 128 are provided to the

optimization engine 112. Additional processed data from the econometric engine 104 may also be provided to the optimization engine 112.

Also, at page 8, starting from line 3, please substitute the following paragraph for the deleted paragraph:

To facilitate understanding, FIG. 7 is an overall flow chart of a process that uses subset optimization 700. First, a product category is optimized (step 701). A demand group is defined as a set of products that are substitutes or near substitutes for each other. A product can belong to only one demand group. A product category consists of one or more demand groups. FIG. 2 is a more detailed flow chart of a preferred embodiment of a process that utilizes the price optimizing system 100 to optimize prices for a product category (step 701). The steps of FIG. 2 start at step 200 as shown. Data 120 is provided from the store computer systems 124 to the econometric engine 104 (step 204). Generally, the data 120 provided to the econometric engine 104 may be point-of-sale information, product information, and store information. The econometric engine 104 processes the data 120 to provide demand coefficients 128 (step 208) for a set of algebraic equations that may be used to estimate demand (volume sold) given certain marketing conditions (i.e. a particular store in the chain), including a price point. The demand

coefficients 128 are provided to the optimization engine 112 (step 212). Additional processed data from the econometric engine 104 may also be provided to the optimization engine 112.

At page 21, starting from line 13, please delete the following paragraph

FIG. 6 is a flow chart of a preferred embodiment of the rule relaxation process. The rules are prioritized (step 604). A default prioritization may be provided, with an interface, which may allow a user to change the prioritization from the default. A check is made to see if a rule is infeasible (step 608). A rule is deemed to be infeasible if the relationship expressed by the rule is not able to be satisfied. For instance a rule $X+Y \leq 10$, is violated for when X is 7 and Y is 7 since then $X+Y=14$ which is greater then 10. If no rule is found to be infeasible, the rule relaxation process is stopped (step 628). If at least one rule is found to be infeasible, the lowest priority infeasible (LPI) rule is found (step 612). A determination is made whether rules with lower priorities than the priority of the LPI rule may be relaxed to allow the LPI rule to become feasible (step 616). In the preferred embodiment the lower priority rules are checked before higher priority rules. If it is found that rules with lower priorities than that priority of the LPI rule may be relaxed to a point that

allows the LPI rule to become feasible, then these rules with lower priorities are relaxed incrementally so that the LPI rule becomes feasible (step 620). In the preferred embodiment, lower priority rules are relaxed before higher priority rules. If it is found that rules with lower priorities than the priority of the LPI rule cannot be relaxed to allow the LPI rule to become feasible, then the LPI rule is relaxed until it becomes feasible (step 624). The rules are then rechecked to see if there are any remaining rules that are infeasible (step 608). This process is continued until all rules are feasible.

Also, at page 21, starting from line 13, please substitute the following paragraph for the deleted paragraph:

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FIG. 6 is a flow chart of a preferred embodiment of the rule relaxation process. The steps of FIG. 6 start at step 600 as shown. The rules are prioritized (step 604). A default prioritization may be provided, with an interface, which may allow a user to change the prioritization from the default. A check is made to see if a rule is infeasible (step 608). A rule is deemed to be infeasible if the relationship expressed by the rule is not able to be satisfied. For instance a rule $X+Y \leq 10$, is violated for when X is 7 and Y is 7 since then $X+Y=14$ which is greater then 10. If no rule is found to be infeasible, the rule relaxation process is stopped (step 628). If at least one rule is found to be

infeasible, the lowest priority infeasible (LPI) rule is found (step 612). A determination is made whether rules with lower priorities than the priority of the LPI rule may be relaxed to allow the LPI rule to become feasible (step 616). In the preferred embodiment the lower priority rules are checked before higher priority rules. If it is found that rules with lower priorities than that priority of the LPI rule may be relaxed to a point that allows the LPI rule to become feasible, then these rules with lower priorities are relaxed incrementally so that the LPI rule becomes feasible (step 620). In the preferred embodiment, lower priority rules are relaxed before higher priority rules. If it is found that rules with lower priorities than the priority of the LPI rule cannot be relaxed to allow the LPI rule to become feasible, then the LPI rule is relaxed until it becomes feasible (step 624). The rules are then rechecked to see if there are any remaining rules that are infeasible (step 608). This process is continued until all rules are feasible.

At page 10, starting from line 8, please delete the following paragraph

The optimal (preferred) set of prices may be sent from the optimization engine 112 to the support tool 116 so that the stores 124 may use the user interface of the support tool 116 to obtain the optimal set of prices. Other methods may be used to provide the optimal set of prices to the

stores 124. The price of the products in the stores 124 is set to the optimal set of prices (step 236), so that a maximization of profit or another objective is achieved.

Also, at page 10, starting from line 8, please substitute the following paragraph for the deleted paragraph:

The optimal (preferred) set of prices may be sent from the optimization engine 112 to the support tool 116 so that the stores 124 may use the user interface of the support tool 116 to obtain the optimal set of prices. Other methods may be used to provide the optimal set of prices to the stores 124. The price of the products in the stores 124 is set to the optimal set of prices (step 236), so that a maximization of profit or another objective is achieved. In step 238, it is ascertained whether optimization should be continued. If the decision in step 238 is to continue optimization, the process of FIG. 2 returns to step 204 to continue optimization. On the other hand, if the decision in step 238 is not to continue optimization, the process of FIG. 2 is done.

Marked up versions of the above paragraphs, which show deletions in brackets "[]" and additions with underlining, to assist the Examiner in reviewing the application, have been included on separate pages entitled "MARKED UP REPLACEMENT PARAGRAPHS IN SPECIFICATION."